

a transport mechanism adapted to transport the bills, one at a time, from the input receptacle to the output receptacles along a transport path;

a discriminating unit adapted to count and denominate the bills, the discriminating unit including a detector positioned along the transport path between the input receptacle and the output receptacles; and

a processor programmed to determine whether the bills meet or fail to meet a non-piece count related criterion, the processor being programmed to cause the transport mechanism to halt in response to a determination that a bill meets or fails to meet the criterion, a bill meeting or failing to meet the criterion being termed a flagged bill, the processor being adapted to cause the transport mechanism to halt with a flagged bill being positioned as the last bill in one of the output receptacles.

#### REMARKS

Claims 164-213 are pending in the application. Claim 164 has been amended. Reconsideration of these claims in view of the remarks below is respectfully requested.

##### I. Obviousness-Type Double Patenting Rejections

Claims 164-213 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of the following U.S. Patent Nos. 5,295,196; 5,430,664; 5,467,405; 5,790,697; 5,806,650; 5,815,592; 5,867,589; 5,870,487; 5,875,259; 5,905,810; 5,992,601; 6,012,565; 6,073,744; 6,220,419 B1; 6,237,739 B1; 6,241,069 B1; 6,278,795 B1 and 6,311,819. To formulate an obviousness-type double patenting rejection, the claims of the pending application must be compared to the claims of an application or a patent. See MPEP 804. In the Office Action, none of the claims of the above-identified U.S. patents has been specifically identified as relating to the obviousness-type double patenting rejections. In order to allow the Applicants to adequately respond to this rejection, the Applicants respectfully request an identification of the specific claim(s) of each of the above-

identified U.S. patents or, alternatively, for these obviousness-type double patenting rejections to be withdrawn.

Provisional Obviousness-Type Double Patenting Rejections

Claims 164-213 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 164-327 of copending Application Nos. 09/541,170 and 09/542,487; claims 157, 158 and 164-190 of copending Application No. 09/635,967; claims 164-337 of copending Application No. 09/607,019; claims 1-145 of copending Application No. 09/684,103; and claims of Application No. 09/126,580.

To obviate some of the provisional obviousness-type double patenting rejections, the Applicants will file a terminal disclaimer with respect to Application Nos. 09/541,170, and 09/542,487 when the other rejections have been withdrawn. The Applicants note that copending Application No. 09/607,019 is the present application and, thus, the obviousness-type double patenting rejection should be withdrawn to this application.

With respect to the remaining provisional obviousness-type double patenting rejections, the Applicants respectfully request the withdrawal of such rejections because the claims of each of the applications have many elements that are not present in any of the claims of the present application. As discussed above, a provisional obviousness-type double patenting rejection involves comparing the claims of the present application to that of a second application.

Specifically, the claims of Application No. 09/684,103 differ from the claims of the present application. For example, claim 1 of Application No. 09/684,103 recites several elements that are not recited in the present invention (e.g., "detecting the presence or absence of

magnetic ink in a plurality of zones," and "comparing the detected information concerning which zones contained magnetic ink...."). Other claims of Application No. 09/684,103 recite some of the same elements, as well as additional elements that are not recited in the present application including elements directed to a magnetic scanhead, a memory adapted to store master security thread location and detecting the presence of a security thread. The claims of the present application also have elements that are not present in the claims of Application No. 09/684,103.

The claims of Application No. 09/635,967 also differ from the claims of the present application. For example, claim 1 of Application No. 09/635,967 recites several elements that are not recited in the present invention (e.g., "a memory adapted to store information associated with a plurality of modes of operation of the device", "the memory being designed to store at least one user-defined mode of operation", "the user-mode of operation being capable of subsequent recall and selection of a user...", "an interface adapted to permit a user of the evaluation device to define the user-defined mode of operation" and "a mode selection element"). Other claims of Application No. 09/635,967 recite some of the same elements, as well as additional elements not recited in the claims of the present application. The claims of the present application also have elements that are not present in the claims of Application No. 09/635,967.

The claims of Application No. 09/126,580 differ from the claims of the present application. For example, claim 1 of Application No. 09/126,580 recites several limitations that are not recited in the present invention (e.g., "a control panel having an input device adapted to receive input from an operator of the device" and "a processor...programmed to...enable the operator, upon suspension of the operation of the device to...signate via the control panel the



denomination of a bill whose denomination is not determined by the processor" and "enable the operator, upon suspension of the operation of the device, to restart the operation of the device without designating the denomination of a bill whose denomination is not determined by the processor)". Other claims of Application No. 09/126,580 recite some of the same elements, as well as additional elements not recited in the claims of the present application. The claims of the present application also have limitations that are not present in the claims of Application No. 09/126,580.

Thus, the Applicants believe that the provisional obviousness-type double patenting rejections with respect to Application Nos. 09/684,103, 09/635,967 and 09/126,580 should be withdrawn.

The Applicants believe that Application No. 09/864,423 recited in the Office Action is not an application owned by the assignee of the present application. The Applicants note that Application No. 08/864,423 is an application owned by the assignee of the present application and issued as U.S. Patent No. 6,311,819, which was recited in the obviousness-type double patenting rejection.

## II. 35 U.S.C § 102 Rejections

Claims 164-213 were rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 5,419,423 to Ishida et al. ("Ishida"), U.S. Patent No. 4,694,963 to Takesako ("Takesako"), U.S. Patent No. 5,201,395 to Takizawa et al. ("Takizawa"), U.S. Patent No. 5,301,786 to Yoshihara ("Yoshihara"), and U.S. Patent No. 5,761,089 to McInerny ("McInerny"). Claims 164-213 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,759,382 to Walkley et al. ("Walkley"). Each of these applied references is



missing at least one element from each of the recited independent claims (claims 164, 204 and 209). In fact, none of the applied references discloses a processor adapted to cause the transport mechanism to halt with a flagged bill as the last bill in one of the output receptacles.

Ishida, does not disclose, *inter alia*, (a) two or more output receptacles, (b) a discriminating unit adapted to count and denominate a stack of bills, and (c) a processor adapted to cause the transport mechanism to halt with a flagged bill as the last bill in one of the output receptacles. Rather, Ishida is directed to "a paper money processor" used "for determination of whether or not the inserted paper money is genuine." Col. 2, lines 8-9 and col. 2, lines 20-21. It is clear that the device of Ishida does not have two or more output receptacles. See, e.g., col. 4, lines 22-25 ("the paper money [is] fed through the paper money transporter section 4 into a paper money accommodation box 6"). Thus, claims 164-213 are not anticipated by or obvious over Ishida.

Takesako, does not disclose, *inter alia*, a processor adapted to cause the transport mechanism to halt with a flagged bill as the last bill in one of the output receptacles. Rather, in Takesako, bills that are not recognized or that do not fit under preset criteria are referred to as "reject bills" and "are stacked in the reject stacker 22." Col. 7, lines 57-58. In fact, the device in Takesako appears to be designed to halt only when a preset number of bills is reached in one of the output receptacles. See, e.g., col. 2, lines 47-50 ("when bills corresponding in quantity to the stack capacity or to a specified quantity less than the stack capacity . . . the sorting operation is automatically interrupted"), and col. 10, lines 57-61 ("[t]he restart key 84 is operated for resuming the sorting operation on a lot of bills set in the feeder 12 after it has been interrupted in

such a case as when the specified quantity is stacked in the stacker 18 or 20."). Thus, claims 164-213 are not anticipated by or obvious over Takesako.

Takizawa, does not disclose, *inter alia*, (a) an input receptacle adapted to receive a stack of bills, (b) a discriminating unit adapted to count the bills, and (c) a processor adapted to cause the transport mechanism to halt with a flagged bill as the last bill in one of the output receptacles. Rather, Takizawa is directed to "a bill examination device used in an automatic cash deposit/dispensation machine or an automatic vending machine". Col. 1, lines 5-9 and col, 2, lines 23-28. It is clear that the device of Takizawa does not have an input receptacle adapted to receive a stack of bills. See, e.g., col. 1, lines 11-17 ("[w]hen a bill (i.e., bank note or paper currency) is inserted or entered by a customer into an automatic cash deposit/dispensation machine or an automatic vending machine, the denomination of the bill is identified and the authenticity of the bill is tested."). Thus, claims 164-213 are not anticipated by or obvious over Takizawa.

As discussed above with respect to Takizawa, Yoshihara also does not disclose, *inter alia*, (a) an input receptacle adapted to receive a stack of bills, (b) a discriminating unit adapted to count the bills, and (c) a processor adapted to cause the transport mechanism to halt with a flagged bill as the last bill in one of the output receptacles. Rather, Yoshihara is directed to "validating a paper-like piece such as a bill or bank note, a note used as a substitute for money, a gift card or a bill made of plastics..." Col. 1, lines 9-12 and col. 3, lines 64-68. It is clear that the device of Yoshihara, as shown in, for example, FIG. 5, does not have an input receptacle adapted to receive a stack of bills, but rather appears to be used in a similar manner as Takizawa

(i.e., in a automatic cash deposit/dispensation machine or an automatic vending machine). Thus, claims 164-213 are not anticipated by or obvious over Yoshihara.

McInerny, does not disclose, *inter alia*, (a) two or more output receptacles, (b) a discriminating unit adapted to denominate the bills, and (c) a processor adapted to cause the transport mechanism to halt with a flagged bill as the last bill in one of the output receptacles. McInery discloses a counterfeit document detection apparatus that includes only one output receptacle. See FIGs. 1 and 2a, and col. 3, line 58-col. 4, line 3. McInery does not denominate bills, but rather is a document counting and handling device that can count, verify and stack a particular type of document, such as currency of the same denomination. See generally col. 1, lines 18-20; col. 2, lines 3-7 and 34-40; col. 3, lines 58-63 and col. 11, line 65 to col. 12, line 43.

McInery not only does not disclose halting the transport mechanism with a flagged bill as the last bill in one of the output receptacles, but teaches away from such an element. See col. 21, lines 47-56 ("...the user is provided with an indication of a counterfeit suspect error in step 290 and the motor is halted. Since the document transport mechanism cannot be instantaneously stopped, both the counterfeit suspect and the next document in the input stack, if any, are delivered to the stacker as the motor is halted in step 290. The control procedure then passes to step 291 in which normal operation is resumed by removal of the counterfeit suspect and the next document from the stacker, placing the next document back into the hopper, and pressing the CONT key.") Thus, claims 164-213 are not anticipated by or obvious over McInery.

Walkley, does not disclose, *inter alia*, (a) a discriminating unit adapted to denominate a stack of bills, and (b) a processor adapted to cause the transport mechanism to halt with a flagged bill as the last bill in one of the output receptacles. Rather, Walkley is directed to an apparatus

for sorting currency according to bill fitness, which is measured according to the wear and tear of the bill, and for counting the bills as they pass through a monitoring station. Col. 4, lines 30-34 and col. 7, lines 3-5. The device in Walkley does not denominate the stack of bills. Similarly, the device in Walkley does not halt with a flagged bill being the last bill, but rather it sorts the stack of bills until a certain count is reached in one of the output receptacles. See, e.g., col. 8, lines 37-49 ("each time fit counter 72 accumulates a count of one hundred, a fit full signal F<sub>Full</sub> is supplied to the feed logic circuitry 78, which responds by interrupting the feeding of currency."). Thus, claims 164-213 are not anticipated by or obvious over Walkley.

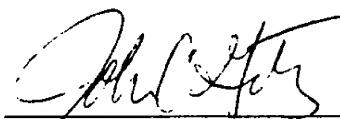
Thus, independent claims 164, 204 and 209 are not anticipated by or rendered obvious over Ishida, Takesako, Takizawa, Yoshihara, McInery, Walkley or any combination thereof. Thus, claims 164, 204 and 209 should be in a condition for allowance. Claims 165-203, 205-208 and 210-213 which depend either directly or indirectly from claim 164, 204 or 209 should also be allowable for at least the same reasons.

## CONCLUSION

The Applicants submit that the claims are in a condition for allowance and action toward that end is earnestly solicited. The Commissioner is hereby authorized to charge deposit Account No. 10-0447 (47171-00268USC1) for any fees inadvertently omitted which may be necessary now or during the pendency of this application, except for the issue fee.

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Serial No. 09/607,019

(Clean) Pending Claims After 1/16/2002 Amendment

164. (Amended) A currency evaluation device for receiving a stack of currency bills and rapidly evaluating all the bills in the stack, the device comprising:

an input receptacle adapted to receive a stack of bills to be evaluated;

two or more output receptacles adapted to receive the bills after the bills have been evaluated;

a transport mechanism adapted to transport the bills, one at a time, from the input receptacle to the output receptacles along a transport path;

a discriminating unit adapted to count and denominate the bills, the discriminating unit including a detector positioned along the transport path between the input receptacle and the output receptacles; and

a processor programmed to determine whether the bills meet or fail to meet a non-piece count related criterion, the processor being programmed to cause the transport mechanism to halt in response to a determination that a bill meets or fails to meet the criterion, a bill meeting or failing to meet the criterion being termed a flagged bill, the processor being adapted to cause the transport mechanism to halt with a flagged bill being positioned as the last bill in one of the output receptacles.

165. The currency evaluation device of claim 164 wherein the input receptacle is adapted to receive and the discriminating unit is adapted to denominate bills of a plurality of United States denominations.

166. The currency evaluation device of claim 164 wherein the discriminating unit is adapted to denominate currency bills independently of the size of the bills.

167. The currency evaluation device of claim 164 wherein the device is adapted to deliver and at least one output receptacle is adapted to receive denominated bills of more than one denomination.

~~168. The currency evaluation device of claim 164 wherein the processor is adapted to cause the transport mechanism to halt when the discriminating unit is not able to determine the denomination of a bill, a bill whose denomination is not determined by the discriminating unit being termed a no call bill, the processor being adapted to cause the transport mechanism to halt with a no call bill being positioned at an identifiable location in one of the output receptacles.~~

~~169. The currency evaluation device of claim 164 wherein bills whose denomination are determined by the discriminating unit are delivered to a first set of one or more of the output receptacles and wherein bills whose denomination are not determined by the discriminating unit are directed to a second set of one or more of the output receptacles, bills whose denomination are not determined by the discriminating unit being termed no call bills, the output receptacles of the second set being different from the output receptacles of the first set.~~

~~170. The currency evaluation device of claim 169 wherein the second set of output receptacles includes a receptacle designated as a no call output receptacle.~~

~~171. The currency evaluation device of claim 170 wherein the processor is adapted to cause the transport mechanism to halt after a no call bill has been delivered to the no call output receptacle.~~

~~172. The currency evaluation device of claim 171 wherein the processor is adapted to cause the transport mechanism to halt with the no call bill being positioned at an identifiable location in the no call output receptacle.~~

~~173. The currency evaluation device of claim 172 wherein the processor is adapted to cause the transport mechanism to halt with the no call bill being the last bill transported to the no call output receptacle, wherein the criterion is the discriminating unit determining the denomination of a bill and wherein a bill failing to meet the criterion of having its denomination determined by the discriminating unit is a flagged bill.~~

174. The currency evaluation device of claim 170 wherein the processor is adapted to cause the transport mechanism to halt before a no call bill has been delivered to the no call output receptacle.

175. The currency evaluation device of claim 174 wherein the processor is adapted to cause the transport mechanism to halt with the no call bill being located at an identifiable location within the transport mechanism.

176. The currency evaluation device of claim 169 wherein the processor is adapted to cause the transport mechanism to halt after the no call bill has been delivered to an output receptacle of the second set.

177. The currency evaluation device of claim 176 wherein the processor is adapted to cause the transport mechanism to halt with the no call bill being positioned at an identifiable location in an output receptacle of the second set.

178. ~~The currency evaluation device of claim 164 wherein a bill failing to have its denomination determined by the discriminating unit is termed a no call bill, wherein the discriminating unit is further adapted to determine whether a bill has a denomination other than a target denomination, a bill having a denomination other than the target denomination being termed a stranger bill, and wherein the device is adapted to deliver stranger bills to a first set of one or more of the output receptacles and deliver no call bills to a second set of one or more of the output receptacles, the output receptacles of the second set being different from the output receptacles of the first set.~~

179. The currency evaluation device of claim 164 wherein the discrimination unit is further adapted to determine whether a bill has a denomination other than a target denomination, a bill having a denomination other than the target denomination being termed a stranger bill and wherein the non-piece count related criterion is the discriminating unit determining that a bill is a stranger bill.

~~180~~ The currency evaluation device of claim ~~164~~ wherein the discrimination unit is further adapted to determine whether a bill is suspect, a bill determined to be suspect being termed a suspect bill.

~~15~~ ~~13~~

~~181~~ The currency evaluation device of claim ~~180~~ wherein bills whose denomination have been determined by the discriminating unit are delivered to a first set of one or more of the output receptacles and wherein suspect bills are directed to a second set of one or more of the output receptacles, the output receptacles of the second set being different from the output receptacles of the first set.

~~bill~~ ~~13~~ ~~19~~ ~~11~~

~~12~~

~~182~~ The currency evaluation device of claim ~~179~~ wherein the second set of output receptacles includes a receptacle designated as a suspect output receptacle.

~~20~~ ~~15~~

~~14~~ ~~14~~

~~183~~ The currency evaluation device of claim ~~182~~ wherein the processor is adapted to cause the transport mechanism to halt before a suspect bill has been delivered to the suspect output receptacle.

~~21~~ ~~16~~

~~20~~ ~~15~~

~~184~~ The currency evaluation device of claim ~~183~~ wherein the processor is adapted to cause the transport mechanism to halt with the suspect bill being located at an identifiable location within the transport mechanism.

~~22~~ ~~17~~

~~16~~ ~~13~~

~~185~~ The currency evaluation device of claim ~~184~~ wherein the processor is adapted to cause the transport mechanism to halt after a suspect bill has been delivered to the suspect output receptacle.

~~23~~ ~~18~~

~~12~~ ~~17~~

~~186~~ The currency evaluation device of claim ~~185~~ wherein the processor is adapted to cause the transport mechanism to halt with the suspect bill being positioned at an identifiable location in the suspect output receptacle.

~~12~~

187 The currency evaluation device of claim 186 wherein the processor is adapted to cause the transport mechanism to halt with the suspect bill being the last bill transported to the suspect output receptacle, wherein the non-piece count criterion is a bill being suspect.

188 The currency evaluation device of claim 164 wherein the criterion is the discriminating unit determining the denomination of the bill, a bill failing to have its denomination determined by the discriminating unit being termed a no call bill, and wherein the processor is adapted to cause the transport mechanism to halt with a no call bill as the last bill in a second set of one or more of the output receptacles.

189 The currency evaluation device of claim 164 wherein the discrimination unit is further adapted to determine whether a bill has a denomination other than a target denomination, a bill having a denomination other than the target denomination being termed a stranger bill and wherein the criterion is a bill being a stranger bill, and wherein the processor is adapted to cause the transport mechanism to halt with a stranger bill as the last bill in a second set of one or more of the output receptacles.

190 The currency evaluation device of claim 164 wherein the criterion is a bill being suspect, and wherein the processor is adapted to cause the transport mechanism to halt with a suspect bill as the last bill in a second set of one or more of the output receptacles.

191 The currency evaluation device of claim 164 wherein a bill failing to have its denomination determined by the discriminating unit being termed a no call bill, and wherein the discriminating unit is further adapted to determine whether a bill is suspect.

192 The currency evaluation device of claim 191 wherein the processor is adapted to cause the transport mechanism to halt when a bill is determined to be suspect by the discriminating unit, a bill determined to be suspect by the discriminating unit being termed a suspect bill.

*24* 195. The currency evaluation device of claim 192 wherein bills whose denomination have been determined by the discriminating unit and suspect bills are delivered to a first set of one or more of the output receptacles and wherein no call bills are delivered to a second set of one or more of the output receptacles, the output receptacles of the second set being different from the output receptacles of the first set.

*full H5* *31 15* *28 2*  
194. The currency evaluation device of claim 191 wherein the second set of output receptacles consists of a single output receptacle.

*27 26* *30 24*  
195. The currency evaluation device of claim 193 wherein the discrimination unit is further adapted to determine whether a bill has a denomination other than a target denomination, a bill having a denomination other than the target denomination being termed a stranger bill and wherein the discriminating unit further is adapted to determine whether bills are stranger bills, and wherein stranger bills are delivered to an output receptacle of the second set.

*23 27* *32 26*  
196. The currency evaluation device of claim 195 wherein the processor is adapted to cause the transport mechanism to halt after a no call bill or a stranger bill has been delivered to an output receptacle of the second set.

*24 28* *33 27*  
197. The currency evaluation device of claim 196 wherein the processor is adapted to cause the transport mechanism to halt with the no call bill or the stranger bill being the last bill transported to an output receptacle of the second set.

*35 29* *37 26*  
198. The currency evaluation device of claim 195 wherein the processor is adapted to cause the transport mechanism not to halt after a no call bill or a stranger bill has been delivered to an output receptacle of the second set.

*34 30* *35 29*  
199. The currency evaluation device of claim 198 wherein the processor is adapted to cause the transport mechanism to halt after a suspect bill has been delivered to an output receptacle of the first set.

*31*      *22*  
 200. The currency evaluation device of claim 191 wherein bills whose denomination have been determined by the discriminating unit are delivered to a first set of one or more of the output receptacles and wherein no call bills are delivered to a second set of one or more of the output receptacles, the output receptacles of the second set being different from the output receptacles of the first set.

*35*      *39*  
 201. ~~The currency evaluation device of claim 200 wherein the processor is adapted to cause the transport mechanism to halt after a no call bill has been delivered to an output receptacle of the second set.~~

*39*  
 202. The currency evaluation device of claim 164 wherein the discriminating unit is adapted to denominate currency bills of a plurality of denominations, bills of at least two of the denominations having the same dimensions.

*203.* The currency evaluation device of claim 164 wherein the discriminating unit is adapted to denominate currency bills of a plurality of denominations, genuine bills of the plurality of denominations having a plurality of images associated therewith, the plurality of images defining the plurality of denominations and wherein the discriminating unit is adapted to distinguish among the plurality of denominations by scanning the image associated with each of the bills.

*41*  
 204. A currency evaluation device for receiving a stack of currency bills and rapidly evaluating all the bills in the stack, the device comprising:

- an input receptacle adapted to receive a stack of bills to be evaluated;
- two or more output receptacles adapted to receive the bills after the bills have been evaluated;
- a transport mechanism adapted to transport the bills, one at a time, from the input receptacle to the output receptacles along a transport path;
- a detector positioned along the transport path between the input receptacle and the output receptacles, the detector being adapted to generate an output signal; and

~~a processor adapted to receive the output signal and programmed to count and denote the bills and programmed to determine whether the bills meet or fail to meet a non-piece count related criterion, the processor being programmed to cause the transport mechanism to halt in response to a determination that a bill meets or fails to meet the criterion, a bill meeting or failing to meet the criterion being termed a flagged bill, the processor being adapted to cause the transport mechanism to halt with a flagged bill being positioned as the last bill in one of the output receptacles.~~

~~42~~ 205. The currency evaluation device of claim ~~204~~ wherein the input receptacle is adapted to receive and the processor is adapted to denominate bills of a plurality of United States denominations.

~~43~~ 206. The currency evaluation device of claim ~~204~~ wherein the processor is adapted to denominate currency bills independently of the size of the bills.

~~44~~ 207. The currency evaluation device of claim ~~204~~ wherein the processor is adapted to denominate currency bills of a plurality of denominations, bills of at least two of the denominations having the same dimensions.

~~45~~ 208. The currency evaluation device of claim ~~204~~ wherein the processor is adapted to denominate currency bills of a plurality of denominations, genuine bills of the plurality of denominations having a plurality of images associated therewith, the plurality of images defining the plurality of denominations and wherein the processor is adapted to distinguish among the plurality of denominations by scanning the image associated with each of the bills.

~~46~~ 209. A currency evaluation device for receiving a stack of currency bills and rapidly evaluating all the bills in the stack, the device comprising:

an input receptacle adapted to receive a stack of bills to be evaluated;  
two or more output receptacles adapted to receive the bills after the bills have been evaluated,

~~a transport mechanism adapted to transport the bills, one at a time, from the input receptacle to the output receptacles along a transport path;~~

a discriminating unit adapted to count and denominate the bills, the discriminating unit including a detector positioned along the transport path between the input receptacle and the output receptacles; and

a processor programmed to flag bills meeting or failing to meet any of a plurality of non-piece count related criteria; wherein the processor is adapted to cause the transport mechanism to halt in response to a determination that a bill meets or fails to meet at least one of the criteria, the at least one criteria being termed a halting criterion, a bill meeting or failing to meet any of the criteria being termed a flagged bill, the processor being adapted to cause the transport mechanism to halt with a bill satisfying the halting criteria being positioned as the last bill in one of the output receptacles.

~~210. The currency evaluation device of claim 209 wherein the input receptacle is adapted to receive and the discriminating unit is adapted to denominate bills of a plurality of United States denominations.~~

~~211. The currency evaluation device of claim 209 wherein the discriminating unit is adapted to denominate currency bills independently of the size of the bills.~~

~~212. The currency evaluation device of claim 209 wherein the discriminating unit is adapted to denominate currency bills of a plurality of denominations, bills of at least two of the denominations having the same dimensions.~~

~~213. The currency evaluation device of claim 209 wherein the discriminating unit is adapted to denominate currency bills of a plurality of denominations, genuine bills of the plurality of denominations having a plurality of images associated therewith, the plurality of images defining the plurality of denominations and wherein the discriminating unit is adapted to distinguish among the plurality of denominations by scanning the image associated with each of the bills.~~



Serial No. 09/607,019

(Marked-Up) Pending Claims After 1/16/2002 Amendment

164. (Amended) A currency evaluation device for receiving a stack of currency bills and rapidly evaluating all the bills in the stack, the device comprising:

an input receptacle adapted to receive a stack of bills to be evaluated;

[exactly] two or more output receptacles adapted to receive the bills after the bills have been evaluated;

a transport mechanism adapted to transport the bills, one at a time, from the input receptacle to the output receptacles along a transport path;

a discriminating unit adapted to count and denominate the bills, the discriminating unit including a detector positioned along the transport path between the input receptacle and the output receptacles; and

a processor programmed to determine whether the bills meet or fail to meet a non-piece count related criterion, the processor being programmed to cause the transport mechanism to halt in response to a determination that a bill meets or fails to meet the criterion, a bill meeting or failing to meet the criterion being termed a flagged bill, the processor being adapted to cause the transport mechanism to halt with a flagged bill being positioned as the last bill in one of the output receptacles.

165. The currency evaluation device of claim 164 wherein the input receptacle is adapted to receive and the discriminating unit is adapted to denominate bills of a plurality of United States denominations.

166. The currency evaluation device of claim 164 wherein the discriminating unit is adapted to denominate currency bills independently of the size of the bills.

167. The currency evaluation device of claim 164 wherein the device is adapted to deliver and at least one output receptacle is adapted to receive denominated bills of more than one denomination.

168. The currency evaluation device of claim 164 wherein the processor is adapted to cause the transport mechanism to halt when the discriminating unit is not able to determine the denomination of a bill, a bill whose denomination is not determined by the discriminating unit being termed a no call bill, the processor being adapted to cause the transport mechanism to halt with a no call bill being positioned at an identifiable location in one of the output receptacles.

169. The currency evaluation device of claim 164 wherein bills whose denomination are determined by the discriminating unit are delivered to a first set of one or more of the output receptacles and wherein bills whose denomination are not determined by the discriminating unit are directed to a second set of one or more of the output receptacles, bills whose denomination are not determined by the discriminating unit being termed no call bills, the output receptacles of the second set being different from the output receptacles of the first set.

170. The currency evaluation device of claim 169 wherein the second set of output receptacles includes a receptacle designated as a no call output receptacle.

171. The currency evaluation device of claim 170 wherein the processor is adapted to cause the transport mechanism to halt after a no call bill has been delivered to the no call output receptacle.

172. The currency evaluation device of claim 171 wherein the processor is adapted to cause the transport mechanism to halt with the no call bill being positioned at an identifiable location in the no call output receptacle.

173. The currency evaluation device of claim 172 wherein the processor is adapted to cause the transport mechanism to halt with the no call bill being the last bill transported to the no call output receptacle, wherein the criterion is the discriminating unit determining the denomination of a bill and wherein a bill failing to meet the criterion of having its denomination determined by the discriminating unit is a flagged bill.

174. The currency evaluation device of claim 170 wherein the processor is adapted to cause the transport mechanism to halt before a no call bill has been delivered to the no call output receptacle.

175. The currency evaluation device of claim 174 wherein the processor is adapted to cause the transport mechanism to halt with the no call bill being located at an identifiable location within the transport mechanism.

176. The currency evaluation device of claim 169 wherein the processor is adapted to cause the transport mechanism to halt after the no call bill has been delivered to an output receptacle of the second set.

177. The currency evaluation device of claim 175 wherein the processor is adapted to cause the transport mechanism to halt with the no call bill being positioned at an identifiable location in an output receptacle of the second set.

178. The currency evaluation device of claim 164 wherein a bill failing to have its denomination determined by the discriminating unit is termed a no call bill, wherein the discriminating unit is further adapted to determine whether a bill has a denomination other than a target denomination, a bill having a denomination other than the target denomination being termed a stranger bill, and wherein the device is adapted to deliver stranger bills to a first set of one or more of the output receptacles and deliver no call bills to a second set of one or more of the output receptacles, the output receptacles of the second set being different from the output receptacles of the first set.

179. The currency evaluation device of claim 164 wherein the discrimination unit is further adapted to determine whether a bill has a denomination other than a target denomination, a bill having a denomination other than the target denomination being termed a stranger bill and wherein the non-piece count related criterion is the discriminating unit determining that a bill is a stranger bill.

180. The currency evaluation device of claim 164 wherein the discrimination unit is further adapted to determine whether a bill is suspect, a bill determined to be suspect being termed a suspect bill.

181. The currency evaluation device of claim 180 wherein bills whose denomination have been determined by the discriminating unit are delivered to a first set of one or more of the output receptacles and wherein suspect bills are directed to a second set of one or more of the output receptacles, the output receptacles of the second set being different from the output receptacles of the first set.

182. The currency evaluation device of claim 179 wherein the second set of output receptacles includes a receptacle designated as a suspect output receptacle.

183. The currency evaluation device of claim 182 wherein the processor is adapted to cause the transport mechanism to halt before a suspect bill has been delivered to the suspect output receptacle.

184. The currency evaluation device of claim 183 wherein the processor is adapted to cause the transport mechanism to halt with the suspect bill being located at an identifiable location within the transport mechanism.

185. The currency evaluation device of claim 181 wherein the processor is adapted to cause the transport mechanism to halt after a suspect bill has been delivered to the suspect output receptacle.

186. The currency evaluation device of claim 185 wherein the processor is adapted to cause the transport mechanism to halt with the suspect bill being positioned at an identifiable location in the suspect output receptacle.



187. The currency evaluation device of claim 186 wherein the processor is adapted to cause the transport mechanism to halt with the suspect bill being the last bill transported to the suspect output receptacle, wherein the non-piece count criterion is a bill being suspect.

188. The currency evaluation device of claim 164 wherein the criterion is the discriminating unit determining the denomination of the bill, a bill failing to have its denomination determined by the discriminating unit being termed a no call bill, and wherein the processor is adapted to cause the transport mechanism to halt with a no call bill as the last bill in a second set of one or more of the output receptacles.

189. The currency evaluation device of claim 164 wherein the discrimination unit is further adapted to determine whether a bill has a denomination other than a target denomination, a bill having a denomination other than the target denomination being termed a stranger bill and wherein the criterion is a bill being a stranger bill, and wherein the processor is adapted to cause the transport mechanism to halt with a stranger bill as the last bill in a second set of one or more of the output receptacles.

190. The currency evaluation device of claim 164 wherein the criterion is a bill being suspect, and wherein the processor is adapted to cause the transport mechanism to halt with a suspect bill as the last bill in a second set of one or more of the output receptacles.

191. The currency evaluation device of claim 164 wherein a bill failing to have its denomination determined by the discriminating unit being termed a no call bill, and wherein the discriminating unit is further adapted to determine whether a bill is suspect.

192. The currency evaluation device of claim 191 wherein the processor is adapted to cause the transport mechanism to halt when a bill is determined to be suspect by the discriminating unit, a bill determined to be suspect by the discriminating unit being termed a suspect bill.

193. The currency evaluation device of claim 192 wherein bills whose denomination have been determined by the discriminating unit and suspect bills are delivered to a first set of one or more of the output receptacles and wherein no call bills are delivered to a second set of one or more of the output receptacles, the output receptacles of the second set being different from the output receptacles of the first set.

194. The currency evaluation device of claim 191 wherein the second set of output receptacles consists of a single output receptacle.

195. The currency evaluation device of claim 193 wherein the discrimination unit is further adapted to determine whether a bill has a denomination other than a target denomination, a bill having a denomination other than the target denomination being termed a stranger bill and wherein the discriminating unit further is adapted to determine whether bills are stranger bills, and wherein stranger bills are delivered to an output receptacle of the second set.

196. The currency evaluation device of claim 195 wherein the processor is adapted to cause the transport mechanism to halt after a no call bill or a stranger bill has been delivered to an output receptacle of the second set.

197. The currency evaluation device of claim 196 wherein the processor is adapted to cause the transport mechanism to halt with the no call bill or the stranger bill being the last bill transported to an output receptacle of the second set.

198. The currency evaluation device of claim 195 wherein the processor is adapted to cause the transport mechanism not to halt after a no call bill or a stranger bill has been delivered to an output receptacle of the second set.

199. The currency evaluation device of claim 198 wherein the processor is adapted to cause the transport mechanism to halt after a suspect bill has been delivered to an output receptacle of the first set.



200. The currency evaluation device of claim 191 wherein bills whose denomination have been determined by the discriminating unit are delivered to a first set of one or more of the output receptacles and wherein no call bills are delivered to a second set of one or more of the output receptacles, the output receptacles of the second set being different from the output receptacles of the first set.

201. The currency evaluation device of claim 200 wherein the processor is adapted to cause the transport mechanism to halt after a no call bill has been delivered to an output receptacle of the second set.

202. The currency evaluation device of claim 164 wherein the discriminating unit is adapted to denominate currency bills of a plurality of denominations, bills of at least two of the denominations having the same dimensions.

203. The currency evaluation device of claim 164 wherein the discriminating unit is adapted to denominate currency bills of a plurality of denominations, genuine bills of the plurality of denominations having a plurality of images associated therewith, the plurality of images defining the plurality of denominations and wherein the discriminating unit is adapted to distinguish among the plurality of denominations by scanning the image associated with each of the bills.

204. A currency evaluation device for receiving a stack of currency bills and rapidly evaluating all the bills in the stack, the device comprising:

an input receptacle adapted to receive a stack of bills to be evaluated;

two or more output receptacles adapted to receive the bills after the bills have been evaluated;

a transport mechanism adapted to transport the bills, one at a time, from the input receptacle to the output receptacles along a transport path;

a detector positioned along the transport path between the input receptacle and the output receptacles, the detector being adapted to generate an output signal; and

a processor adapted to receive the output signal and programmed to count and denominate the bills and programmed to determine whether the bills meet or fail to meet a non-piece count related criterion, the processor being programmed to cause the transport mechanism to halt in response to a determination that a bill meets or fails to meet the criterion, a bill meeting or failing to meet the criterion being termed a flagged bill, the processor being adapted to cause the transport mechanism to halt with a flagged bill being positioned as the last bill in one of the output receptacles.

205. The currency evaluation device of claim 204 wherein the input receptacle is adapted to receive and the processor is adapted to denominate bills of a plurality of United States denominations.

206. The currency evaluation device of claim 204 wherein the processor is adapted to denominate currency bills independently of the size of the bills.

207. The currency evaluation device of claim 204 wherein the processor is adapted to denominate currency bills of a plurality of denominations, bills of at least two of the denominations having the same dimensions.

208. The currency evaluation device of claim 204 wherein the processor is adapted to denominate currency bills of a plurality of denominations, genuine bills of the plurality of denominations having a plurality of images associated therewith, the plurality of images defining the plurality of denominations and wherein the processor is adapted to distinguish among the plurality of denominations by scanning the image associated with each of the bills.

209. A currency evaluation device for receiving a stack of currency bills and rapidly evaluating all the bills in the stack, the device comprising:

an input receptacle adapted to receive a stack of bills to be evaluated;  
two or more output receptacles adapted to receive the bills after the bills have been evaluated;



a transport mechanism adapted to transport the bills, one at a time, from the input receptacle to the output receptacles along a transport path;

a discriminating unit adapted to count and denominate the bills, the discriminating unit including a detector positioned along the transport path between the input receptacle and the output receptacles; and

a processor programmed to flag bills meeting or failing to meet any of a plurality of non-piece count related criteria; wherein the processor is adapted to cause the transport mechanism to halt in response to a determination that a bill meets or fails to meet at least one of the criteria, the at least one criteria being termed a halting criterion, a bill meeting or failing to meet any of the criteria being termed a flagged bill, the processor being adapted to cause the transport mechanism to halt with a bill satisfying the halting criteria being positioned as the last bill in one of the output receptacles.

210. The currency evaluation device of claim 209 wherein the input receptacle is adapted to receive and the discriminating unit is adapted to denominate bills of a plurality of United States denominations.

211. The currency evaluation device of claim 209 wherein the discriminating unit is adapted to denominate currency bills independently of the size of the bills.

212. The currency evaluation device of claim 209 wherein the discriminating unit is adapted to denominate currency bills of a plurality of denominations, bills of at least two of the denominations having the same dimensions.

213. The currency evaluation device of claim 209 wherein the discriminating unit is adapted to denominate currency bills of a plurality of denominations, genuine bills of the plurality of denominations having a plurality of images associated therewith, the plurality of images defining the plurality of denominations and wherein the discriminating unit is adapted to distinguish among the plurality of denominations by scanning the image associated with each of the bills.

